ERC Talking Points Inactive Hazardous Sites Program 1/26/12

The Inactive Hazardous Sites Response Act was enacted by the legislature to address properties contaminated with hazardous substances.

This law requires annual reporting to the Environmental Review Commission

The IHSRA requires financially-viable responsible parties to cleanup these cases.

And it established the **Inactive Hazardous Sites Cleanup Fund** to help address those sites without financially-viable responsible parties.

The sites covered by this law **pose uncontrolled risks to the public** by:

- direct contact with the contamination,
- through the **migration of contaminated** groundwater affecting drinking water supplies,
- through contact with contaminated streams and fish,
- and through exposure to **contaminated vapors** coming from contaminated soils and groundwater making its way into homes and other buildings.

The **Federal Superfund Program** that addresses hazardous substance contaminated sites at the federal level only looks at the Nation's worst cases and less than 5% are addressed through the Superfund Program, **leaving most** cases to States to address.

Thus, most states have cleanup programs for the remainder of cases.

There are currently 3044 Inactive Hazardous sites cataloged

Of this number, **452** have work completed and are assigned "no further action" status

**676** of the cases cataloged are old unlined landfills that operated largely before there were solid and hazardous waste disposal regulations prohibiting what could be disposed in landfills

## These pre-regulatory landfills pose threats from

- contaminated groundwater reaching drinking water wells and
- from hazardous substance and methane vapors off-gassing from the waste and contaminated groundwater and then migrating into buildings on or near the landfill thereby posing health risks and possible explosion hazards

77% of these PRLF sites have residences, schools, day cares, parks, churches or drinking water sources on or within 1000 feet of the landfill

In 2007, SB 1492 established legislation to address these risks.

This legislation established a **state-wide disposal tax** on solid waste.

**50% of the tax** goes to fund the assessment and **mitigation of the hazards** at these pre-regulatory landfills

37.5% goes to local governments and 12.5% goes to the Solid Waste Management Trust Fund

There are provisions in the legislation for the tax to be used to **reimburse waste management companies** that had made LF permit applications that became ineligible due to a change in the landfill permitting requirements that accompanied the bill.

The companies had to make reimbursement claims by a specific date.

**Three claims** were made. 2 are settled and paid out. The 3<sup>rd</sup> is in litigation.

The disposal tax went into effect in July of 2008 and the 1<sup>st</sup> proceeds were received by DENR in Feb 2009.

The tax **generates approximately \$9 million** annually for the mitigation of the pre-regulatory landfills. (*to date approx 26.7 million*)

The legislation originally allowed **7% of** the revenue to be used for administrative purposes and staffing to implement the program.

The early receipts were lower than expected and the program **could not be fully staffed.** 

In the FY10-11, the Inactive Hazardous Sites Program budget was **cut by** \$300,000. (25%) of the non-PRLF portion of the IHSP).

Legislation **shifted the funding** to the solid waste disposal tax.

The cap on administrative expenses had to be raised to 13% to support both the \$300,000 portion of the Inactive Hazardous Sites Program Budget and the staff needed to implement the program for addressing the pre-regulatory landfills.

With these adjustments, 6 staff have now been hired to implement the preregulatory landfill program with one other planned.

The program has established **5 contracts** with engineering firms to do the assessment and mitigation of the exposure problems at these sites.

Four more contracts are in the works.

The **first steps of this program were to complete locating** all the sites and determining what **immediate exposure risks** existed.

The information existing on these sites was **very limited** in most of the cases.

We **conducted location**, **use**, **and receptor** research at each. This work has been **completed** 

We then **needed to prioritize** the sites for action.

We developed a **prioritization system** that takes in to account:

- are there drinking water wells in the area,
- how many,
- are any contaminated
- is the property and surrounding area residential or some other sensitive use,
- are there buildings on the landfill
- are there surface water intakes for drinking water in the area
- Is there previous data indicating elevated methane levels at the site which could pose an explosion hazard?

We completed the data collection, compilation and prioritization.

The **next step is to conduct assessments** of the sites, to evaluate the particular hazards, working in priority order by risk.

We do make **redevelopment cases a priority**, because we need to get the work done before the use changes and potentially causes exposure or the development makes it difficult to collect samples.

The **first phase of the assessment involves** conducting geophysical work to determine the **footprint of the landfill** and to **survey sensitive environments** that may be present and **sample drinking water** wells in the area.

This is **followed by an investigation** where samples are collected of groundwater, soils, surface water in streams, and vapors above and below ground.

A series of sampling events occur until the extent of contamination is defined

We have completed **46 of the first phase** investigations and **41 of the second phase**.

Once the extent of contamination has been defined, we **then can develop a plan for remedying** the site.

**Due to the size these landfills**, this will rarely involve complete removal of the waste because of the cost.

**Hot spots** of highly contaminated wastes may be removed.

## Remedies for the sites include:

- **Repair or construction** of a cap to prevent surface water runoff contamination and prevent direct contact,
- Providing alternate water supplies to those affected
- Addressing contaminant vapor intrusion into buildings by installing air venting systems and other mechanisms
- Removal of hot spots of grossly contaminated wastes
- Placing land use restrictions to prevent uses that would cause exposure
- Conducting groundwater remediation where necessary.

**39 newly discovered sites** screened for PRLF program eligibility in FY10-11

Also in FY10-11, **119 private wells** were sampled around LF sites.

**Alternate water** has been provided at 11 homes at 5 LF sites.

**68 natural gas alarms** as precautionary measures have also been installed in certain buildings.

Counties and property owners are provided laboratory results and health risk evaluations by a toxicologist on all contaminated drinking water wells.

Every county has been notified of the landfills in their county and we notify them each time there is a sampling event.

SB1492 also allowed that local governments could conduct the sampling assessments at high risk sites and **seek reimbursement** for their expenses.

There have been **5 such cases** that the program has been overseeing and approving the work.

With the non-prergulatory landfill portion of the Inactive Hazardous Sites Program there remain 1916 open cases

The **inventory of sites** continues to grow.

**68 new** sites were discovered this reporting year

We thus must address these cases in priority order based on hazard posed.

We are currently able to address 193 priority cases.

We also have **126** lesser priority sites undergoing voluntary cleanup under our **privatized oversight** program known as the Registered Environmental Consultant Program.

Under the REC Program, Division-approved consultants hired by volunteering parties **not only conduct the cleanup actions for their client, but also certify** their actions met the program rules.

This is **in place of state oversight**.

**Staff audit** a portion of the actions to check compliance.

The Inactive Hazardous Sites **Cleanup Fund** was established to help address sites not having financially-viable responsible parties.

In FY10-11, sampling assessments, remediation of immediate hazards and/or provisions for alternate drinking water were conducted at **14 orphan sites.** 

Approximately \$484K was spent on those activities this reporting year.

The Cleanup Fund's only **regular source** of income is a portion of the Scrap Tire Tax which it began receiving 2 ½ years ago.

Approximately \$390K is received annually from this tax.

To supplement this revenue, the program works with the AG's office to file bankruptcy claims at contaminated sites.

This revenue is **dedicated** to these cases and **varies** heavily in amounts that can be recovered.

Activities related to 8 bankruptcy claims involving 21 sites occurred in FY10-11

As far as numbers of known high risk sites, there are currently **422 sites** having 1 or more drinking water wells with detectable contamination or where wells are within 500 feet of a known source.

About **half of** these sites have responsible parties.

Of this 422, **36 sites have wells exceeding the federal** drinking water limits. These are clearly active priorities and are **being worked on**.

There are **173 sites where residential** areas, not industry, constitute the main part of the site. **56** are additional priority sites not counted in the 422 figure.

And there are sites that are higher priorities due to **surface water drinking water** intakes being close by, and sites being used as **parks**, **schools and such**.

In addition to the work on the highest priority cases, bankruptcy cases and REC program oversight we are also working on:

- responding to requests for no further action certification as called for under law
- responding to immediate chemical spills
- screening **newly reported** sites

Staff also spend about 25% of their time responding to requests from the public and the press on information on sites.

Toward this end, the program has been working on efforts to try to **convert its records to electronic form** so they are more readily available to the public.